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Remarks

The final Office Action mailed July 25, 2006 provided a final rejection of all pending claims 1-2, 4-5, 8-13, 17 and 25-43.

Post final amendments have been provided above to independent claims 1, 25 and 32, and dependent claims 5, 29 and 33-34 have been cancelled without prejudice.

More specifically:

1. The language of cancelled dependent claim 5 has been added to independent claim 1;
2. The language of cancelled dependent claim 29 has been added to independent claim 25; and
3. The language of cancelled dependent claims 33-34 has been added to independent claim 32.

These amendments are proper, do not introduce new matter, and serve to place the application in better condition for allowance or alternatively, for appeal. The amendments raise no new issues requiring further consideration or searching, since the subject matter of these claims has already been presented to the Examiner for consideration in the previous action. Entry of these amendments is therefore respectfully solicited.

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Rejection of Claims Under 35 U.S.C. §102(b)

Claims 1-2, 4, 8, 10-12, 17, 25-30, 32-34, 36, 38 and 40-43 were finally rejected as being anticipated by U.S. Patent No. 5,212,677 by Shimote et al. ("Shimote '677"). This rejection is respectfully traversed.

1. Independent Claim 25

Independent claim 25 now generally features "means for assigning a category for the defective region by combining a plurality of data readback signals received from different tracks adjacent the defective region, wherein the means for assigning comprises means for generating a topographical image of the defective region of the media surface" (amended claim 25, emphasis added). As noted above, the "means for generating" language in claim 25 was previously presented for consideration by the Examiner in cancelled dependent claim 29.

In support of the final rejection of claim 29, the final Office Action stated that Shimote '677 discloses "imaging step/element compris[ing] an array of data points each having independent coordinate X and Y with respect to storage media (see col. 6 lines 10-15)." (Final Office Action, page 3, lines 1-3). This is not believed to be a correct characterization of Shimote '677.

Rather, Shimote '677 states at this section that the "computer 8 also outputs the position information of an X-Y stage (not shown) for the inspection of the optical disk by means of a microscope (not shown)." Shimote '677, col. 6, lines 12-15.

Providing coordinates to an X-Y stage to allow a user to view the defect via a microscope is not the same, explicitly or inherently, as "generating a topographical image of the defective region" as claimed. "Topographical" and "image" are terms of art to be given its ordinary and customary meaning as understood by the skilled artisan

in view of the written description. *Phillips v. AWH Corporation*, 75 USPQ2d 1321 (Fed. Cir. 2005)(*en banc*); *In re Morris*, 44 USPQ2d 1023 (Fed. Cir. 1997); MPEP 2111.01.

The term “topographical image” would be clearly understood by such artisan in the present case as a three-dimensional plot of the defective region. See e.g. FIGS. 2 and 3; page 5, lines 13-15; page 7, lines 3-11; and page 14, lines 14-21 (field strength is the z-axis datum in the exemplary image of FIG. 2). Such a “topographical image” is not generated by the structure disclosed by Shimote ‘677.

Moreover, it is noted that claim 25 is written in accordance with 35 U.S.C. §112, sixth paragraph. Since the X-Y stage and microscope of Shihote ‘677 do not carry out the recited function of “*generating a topographical image of the defective region*,” this structure cannot be viewed as an equivalent for purposes of §112, sixth paragraph. *In re Donaldson Co. Inc.*, 29 USPQ2d 1845 (Fed. Cir. 1994)(*en banc*); *In re Bond*, 15 USPQ2d 1566 (Fed. Cir. 1990); MPEP 2181 et seq. .

Accordingly, it is respectfully submitted that claim 25 is not anticipated by Shimote ‘677. Reconsideration and allowance of claim 25, and for the claims depending therefrom, are requested on this basis.

2. Independent Claim 32

Independent claim 32 generally features “a memory storing a plurality of predefined profiles associated with likely types of defects associated with respective characteristic sizes of the defective region, wherein the predefined profiles comprise a characteristic size associated with the defective region likely being characteristic of a scratch” (amended claim 32, emphasis added). As noted above, the foregoing language was previously considered via cancelled dependent claims 33-34.

In support of the rejection of claim 34, the final Office Action identified FIG. 6 and elements 3, 7 and 8 of FIG. 7 of Shimote '677 as disclosing "*identifying defective region as likely being characteristic of a scratch/corrosion.*" (Final Office Action, p. 2, lines 20-22). This is respectfully traversed as a mischaracterization of the disclosure of Shimote '677.

Shimote '677 is silent with regard to disclosing "*a characteristic size associated with the defective region likely being characteristic of a scratch.*" Shimote '677 classifies defective regions as small, medium and large (S, M and L). See col. 9, lines 3-14 and FIGS. 23-25 (note that these are all class "M" in FIGS. 23-25). The Applicant notes that word "scratch" does not appear anywhere in Shimote '677, and nowhere does Shimote '677 explicitly disclose "*a characteristic size associated with the defective region likely being characteristic of a scratch,*" as claimed.

With regard to anticipation by inherency, the skilled artisan must view the claimed subject matter as being necessarily present in the cited reference; a mere possibility is not enough. *Continental Can Co. v. Monsanto*, 20 USPQ2d 1746 (Fed. Cir. 1991). In the present case, the classifications of size by Shimote '677 cannot be viewed as necessarily requiring "*a characteristic size associated with the defective region likely being characteristic of a scratch,*" as claimed by claim 32.

The classifications of Shimote '677 relate merely to the overall areal extent of the defective regions. It makes no difference whether a particular defect is long and skinny, or short and fat, with regard to whether the assigned class is S, M or L. A given scratch could just as easily be classified as S, M or L depending on the overall area of the scratch. This is because the system in Shimote '677 merely identifies the locations and relative sizes of the defective regions to allow a user to subsequently view the defects manually via a microscope.

It follows then that the skilled artisan would not view Shimote '677 as inherently disclosing *"a memory storing a plurality of predefined profiles associated with likely types of defects associated with respective characteristic sizes of the defective region, wherein the predefined profiles comprise a characteristic size associated with the defective region likely being characteristic of a scratch."*

As claim 32 is not anticipated by Shimote '677, reconsideration and withdrawal of the rejection of claim 32, and for the claims depending therefrom, are respectfully requested.

Rejection of Claims Under 35 U.S.C. §103(a)

Claims 5 and 37 were rejected as being obvious over Shimote '677 in view of U.S. Patent No. 6,151,180 to Bang ("Bang '180"). 9, 13, 31, 35 and 39 were additionally rejected as being obvious over Shimote '677 alone or in combination with other art. These rejections are respectfully traversed.

With regard to independent claim 1, as amended this claim now generally features *"a step of indicating that the defective region is unreliable if a ratio defined by a size of a portion of the defective region with a less-than-expected readback signal strength compared to a total size of the defective region is greater than a preselected threshold."* As noted above, the foregoing language has been considered by the Examiner via cancelled dependent claim 5.

In support of the final rejection of claim 5, the Examiner stated that the foregoing language *"is disclosed by Bang (see col. 3 lines 33-67)"* (Final Office Action, page 4, lines 1-9). This is respectfully traversed.

Bang '180 teaches a defect scan circuit 216 which rectifies an equalized readback signal, and then compares the rectified signal to a reference threshold. Col. 3, lines 46-54.

If the rectified signal amplitude is higher than the threshold, no defect is detected and a low output is provided to a NRZI circuit 218. Col. 3, lines 54-57. Conversely, if the rectified signal amplitude is lower than the threshold, a defect is detected and a high output is provided to the NRZI circuit 218. Col. 3, lines 57-61.

This teaches nothing of any particular significance with regard to the actual claim language, which requires "*indicating that the defective region is unreliable if a ratio defined by a size of a portion of the defective region with a less-than-expected readback signal strength compared to a total size of the defective region is greater than a preselected threshold.*" The claim does not merely recite a "defective region," but further recites that the region is identified as "unreliable," a point on which both Shimote '677 and Bang '180 are silent.

The Applicant points out that the claim language requires a "ratio" to be greater than a "predetermined threshold" in order for the defective region to be indicated as "unreliable." It is not just a read signal that is compared to a threshold, but rather a "ratio" that is compared to the threshold.

Moreover, the recited "ratio" is defined in terms of area: "*a size of a portion of the defective region with a less-than-expected readback signal strength*" which is compared to "*a total size of the defective region.*" Shimote '677 and Bang '180 are further silent with regard to these features as well.

Accordingly, claim 1 is nonobvious over Shimote '677 and Bang '180 on the basis that these references fail to teach or suggest all the limitations of the claim, as well as on the basis that there is nothing that would motivate one skilled in the art to arrive at

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the subject matter of claim 1 from the teachings and suggestions of these references.
Reconsideration and withdrawal of the rejection of claim 1, as well as for the claims
depending therefrom, are respectfully solicited.

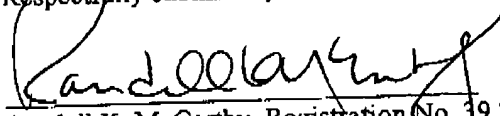
Conclusion

This is intended to be a complete response to the final Office Action mailed July
25, 2006. The Applicant respectfully requests that the Examiner enter the above
amendments, reconsider the application and allow all of the pending claims.

The Examiner is invited to contact the below signed Attorney should any
questions arise concerning this response.

Respectfully submitted,

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